

X - Mathematics Assignment No-09 - Surface Area and VolumeM. C. Q.

Q1. The edge of a cube is 6cm. The length of the longest rod that can be kept inside the cube has the length

- (i)  $6\sqrt{3}$  cm (ii)  $12\sqrt{3}$  cm (iii) 96 cm (iv) 216 cm

Q2. S.A of Cuboid = Area of four walls +  $x$ , the value of  $x$  is

- (i)  $lb$  (ii)  $2lb$  (iii)  $lh$  (iv)  $2lh$ .

Q3. If TSA of a cube and its volume are equal then the edge of the cube is

- (i) 36 units (ii) 216 units (iii) 6 units (iv) 24 units

Q4. Three equal cubes are placed adjacently in a row. Find the ratio of T.S.A of the new cuboid to that of the sum of the surface areas of the three cubes.

- (i) 2:3 (ii) 4:5 (iii) 9:7 (iv) 7:9

Q5. The diagonal of a cube is  $\sqrt{27}$  Units, its edge is

- (i) 3 units (ii) 6 units (iii) 9 units (iv)  $3\sqrt{3}$  units.

Cont Pg-2

Q6. A solid cube of side 12cm is cut into eight cubes of equal volume. The side of new cube is

- (i) 12cm (ii) 6cm (iii) 3cm (iv) 9cm

Q7. A cuboidal vessel is 15m long 6m wide, how high must it be made to hold  $360\text{m}^3$  of a liquid.

- (i) 12m (ii) 8m (iii) 4m (iv) 1m

Q8. Total S.A. of a hollow cylinder is

- (i)  $2\pi(R^2 - r^2)$  (ii)  $2\pi(R^2 - r^2) + \pi h^2$  (iii)  $2\pi(r^2 - R^2) + \pi r^2$   
 (iv)  $2\pi(R+r)(R-r+h)$

Q9. The C.S.A of a cylinder is 660 sq. cm. If height of the cylinder is 15cm, its radius is

- (i) 7cm (ii) 8cm (iii) 9cm (iv) 12cm

Q10. The C.S.A of a cylinder is  $4400\text{cm}^2$  and the circumference of its base is 110cm. The height of the cylinder is

- (i) 60cm (ii) 40cm (iii) 20cm (iv) 80cm

<u>ANSWERS</u>	
(Q1) (i)	(Q5) (i)
(Q2) (ii)	(Q6) (ii)
(Q3) (iii)	(Q7) (iii)
(Q4) (iv)	(Q8) (iv)
	(Q9) (i)
	(Q10) (ii)